

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO**

IN RE: GOLD KING MINE RELEASE
IN SAN JUAN COUNTY, COLORADO,
ON AUGUST 5, 2015

No. 1:18-md-02824-WJ

This Document Relates to All Cases

MEMORANDUM OPINION AND ORDER
GRANTING UNITED STATES' MOTION TO EXCLUDE EXPERT TESTIMONY OF
ALLEN PLAINTIFFS' EXPERT DR. KARLETTA CHIEF

The *Allen* Plaintiffs retained Dr. Karletta Chief "to assist them in litigation related to a mine blowout at the Cold King Mine ... on August 5, 2015." Expert Report by Karletta Chief at 1, Doc. 1630-3, filed April 28, 2022 ("Chief Expert Report").

Dr. Chief is an experienced and credentialed expert in her field of socio-hydrology, with a focus in vadose zone hydrology,¹ water quality, watershed characterization, climate change, water policy and management, and mining impacts; she also has a national profile for her work on community-based tribal research. **Ex. 1** at 3, **Ex. 2** at 16:16-20.² In her research, she collaborates with social, environmental, and health scientists and incorporates Indigenous knowledge, practices, perspectives, and values. **Ex. 1** at 2. Dr. Chief testified that she "typically do[es] interdisciplinary research in collaborations with other research --researchers, including those that have expertise in psychology and social sciences. And in those collaborations, we do research related to social science." **Ex. 2** at 15:5-9. The reliability of Dr. Chief's methodology and the conclusions drawn from her research are readily apparent—her research was funded by the National Institute of Health, *id.* at 19:24-20:5, involved the University of Arizona, Northern Arizona University, Diné College, and Fort Lewis College, **Ex. 1** at 3, was approved and monitored by the HRRB [Navajo Nation Human Research Review Board], **Ex. 2** at 22:2-15, 111:25-112:3, and was peer-reviewed and published in the *Journal of Exposure Science & Environmental Epidemiology*, *id.* at 20:6-14, 144:11–146:23; 239:18–240:15; 402:11-17.

Response at 10-11. Footnote 2 in the preceding quote states:

The field "of socio-hydrology is a special case of social-ecological systems research that focuses on coupled human-water systems, exploring how the hydrologic cycle and human cultural traits coevolve and how such co-evolutions lead to phenomena of relevance to water security and sustainability." David J. Yu, et al, *Socio-hydrology: An Interplay of Design and Self-Organization in a Multilevel World*, Ecology and Society (2020).

Response at 11.

¹ "Vadose zone hydrology" is the study of groundwater in the unsaturated zone of the subsurface. See R. Allan Freeze and John A. Cherry, *Groundwater* 44 (1979).

Dr. Chief summarizes her opinions as follows:

Opinion 1 – Environmental Impacts: It is my opinion that the Gold King Mine Spill significantly disrupted Diné² families and communities along the San Juan River, including the Allen Plaintiffs. The Gold King Mine Spill contaminated the water and disrupted the Diné people's relationship to the San Juan River.

Opinion 2 – Economic and Livelihood Impacts: It is my opinion that the Gold King Mine Spill severely impacted the economies and livelihoods of the Diné people along the San Juan River, including the Allen Plaintiffs, by disrupting their farming and ranching, creating financial loss, creating a stigma to the quality of their agricultural products, and preventing their ability to produce crops for cultural and ceremonial practices.

Opinion 3 – Family and Community Impacts: It is my opinion that the Gold King Mine Spill negatively affected the Diné families and communities along the San Juan River, including the Allen Plaintiffs, by contributing to the Diné people's distrust of the U.S. federal government. There was no demonstration of transparent leadership and the community was unsure of who was advocating on their behalf. They described the situation as being fraught by poor communication about, and inadequate responses to Gold King Mine Spill.

Opinion 4 – Spiritual and Ceremonial Impacts: It is my opinion that the Gold King Mine Spill stifled and jeopardized the spiritual and ceremonial lifeways of the Diné people along the San Juan River, including those of the Allen Plaintiffs, by halting or severely constraining their spiritual and ceremonial practices, inhibiting access to the San Juan River and its riparian corridor for sacred sites, inhibiting access to ceremonial plants, and constricting their ability to pass on traditional and cultural knowledge as these are strongly connected to and dependent on their interactions with their physical environment.

Opinion 5 – Long Term Impacts: It is my opinion that the Gold King Mine Spill created substantial long term detrimental impacts on Diné communities by building a high-risk perception of engaging with the San Juan River. As a result of the Gold King Mine Spill, the Diné people have a deepened distrust of non-Native entities and the U.S. government and a collective concern for their children and grandchildren's relationship with the San Juan River and the continuance of traditional Diné farming practices and Diné centered knowledge systems that are connected with traditional practices.

Opinion 6 – Amplifying Historical Trauma: It is my opinion that the Gold King Mine Spill substantially added to the extensive historical trauma and generational assaults inflicted by the U.S. government on the Diné people. The Diné people possess a great deal of distrust toward the U.S. government because of the collective recollections they hold regarding the centuries of state-sanctioned systemic and structural violence and losses they and their ancestors endured at the direction of the U.S government through its assimilation campaigns and policies. They do not

² "Diné" means "Navajo." See Chief Expert Report at 1.

trust water quality results and they do not believe the U.S. government will compensate Diné for the losses from the Gold King Mine Spill due to the history of broken promises made by the U.S. government.

Chief Expert Report at 2.

Dr. Chief's opinions are based on: (i) her personal experiences; and (ii) "research that she conducted concerning the risk perception and impact of the Spill on the use and engagement with the River within three Navajo Nation communities." Response at 7. Dr. Chief explained:

I am culturally informed as a Navajo scientist who grew up on the Navajo Nation, immersed in the Navajo culture, as well as living it myself on a daily life. So although I don't have a Ph.D. in indigenous study -- studies, I am Navajo, and I do -- I was raised in -- on the Navajo Nation and immersed in my culture and continue to live that culture, as well as belong to a community where I continually learn on a daily basis from my elders and friends, and other community members about the Navajo culture in general. So I think in my lived experiences, I do have that knowledge. But in the western world, I do not have a Ph.D. in indigenous studies. So that's the difference.

Response at 10.

Dr. Chief's opinions are derived from three different data collection efforts by the Diné Exposure Project's interdisciplinary team, including 1) focus groups in 2016 which collected qualitative data regarding community concerns and impacts, 2) household questionnaires in 2016 which collected quantitative data regarding risk perception and the impact on community members' use and engagement with the River in the year following the spill, and 3) farmer surveys which collected data on the impact of the spill on agricultural farming three years after the spill.

Response at 7.

The United States seeks to exclude Dr. Chief's testimony because "Dr. Chief is not qualified to offer these opinions" and because

Dr. Chief's opinions are irrelevant and unhelpful to the trier of fact because they do not address the pertinent factual inquiry in this case—whether any individual *Allen* Plaintiff suffered annoyance, disturbance, or loss of use and enjoyment. Instead, she offers broad conclusions regarding the Navajo people as a whole and acknowledges that she reports only “averages.” Because Dr. Chief's broad conclusions are not tied to information regarding the individual plaintiffs, her opinions are irrelevant and unduly prejudicial to the defendants. The relevant source of information for the *Allen* Plaintiffs' claims for annoyance, disturbance, or loss of use and enjoyment is the Plaintiffs themselves, a source of information that Dr. Chief fails even to consider.

Motion at 6. Colorado law³ allows for noneconomic damages of annoyance and discomfort. *See Hendricks v. Allied Waste Transp., Inc.*, 282 P.3d 520, 524-525 (Colo. App. 2012). The "annoyance and discomfort for which damages may be recovered on nuisance and trespass claims generally refers to distress arising out of physical discomfort, irritation, or inconvenience" caused by the tortious acts. *Id.* (stating plaintiffs are not entitled to recover for emotional distress).

Admission of Expert Testimony Under Rule 702

Rule 702, which governs testimony by expert witnesses, provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if:

- (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue;
- (b) the testimony is based on sufficient facts or data;
- (c) the testimony is the product of reliable principles and methods; and
- (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

Federal Rule of Evidence 702 requires the district court to "ensur[e] that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Daubert*, 509 U.S. at 597, 113 S.Ct. 2786. Under Rule 702, the court must first decide whether the proffered expert is qualified "by knowledge, skill, experience, training, or education" to render an opinion. *See* Fed. R. Evid. 702. Then "the court must determine whether the expert's opinion is reliable by assessing the underlying reasoning and methodology, as set forth in *Daubert*." *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009) (en banc).

³ "Colorado law governs Plaintiffs' tort claims." Mem. Op. and Order at 18, Doc. 166, filed March 20, 2019 ("The Supreme Court of the United States has held 'that when a court considers a state-law claim concerning interstate water pollution that is subject to the [Clean Water Act], the court must apply the law of the State in which the point source is located'" (quoting *International Paper Co. v. Ouellette*, 479 U.S. 481, 487 (1987)) (restating the holding in *Ouellette* as "the Clean Water Act taken 'as a whole, its purposes and its history' pre-empted an action based on the law of the affected State and that the only state law applicable to an interstate discharge is 'the law of the State in which the point source is located'" (quoting *Arkansas v. Oklahoma*, 503 U.S. 91, 100 (1992))).

Bill Barrett Corp. v. YMC Royalty Co., LP, 918 F.3d 760, 770 (10th Cir. 2019).

Expert Qualifications

To perform its gatekeeping function, the Court generally takes two steps. One step is to determine whether the expert is qualified by “knowledge, skill, experience, training, or education” to render an opinion. *See* Fed. R. Evid. 702. The other step is to decide whether their opinions are sufficiently reliable and will help the trier of fact to understand the evidence or determine a fact in issue. The Court does not address Dr. Chief’s qualifications because the Court finds Dr. Chief’s opinions will not be helpful to the trier of fact.

Opinion Helpfulness

It appears from the *Allen* Plaintiff’s Response that the purpose of Dr. Chief’s opinions is to provide context for the *Allen* Plaintiffs’ decisions following the Gold King Mine Release. The *Allen* Plaintiffs state:

The United States, along with the other Defendants in this litigation, have made an issue out of whether the *Allen* Plaintiffs’ decisions were reasonable. *See* Dkt. 1475 at 17-18 (Weston Solutions, Inc. arguing that disruptions to water supply amount to a “personal choice” asserting that “interference with the use of property, if any, that the individual plaintiffs suffered due to the spill was limited in duration.”). According to Defendants, the *Allen* Plaintiffs should have trusted the United States and the Environmental Protection Agency (“EPA”) when they told them that the River was safe to use to irrigate their crops and water their animals and that any *Allen* Plaintiff who “refused” to use the water acted unreasonably and failed to mitigate their damages. *See id.* Dr. Chief’s opinions will help the trier of fact better understand, among other things, the cultural and historical context that were, and are, at play regarding the *Allen* Plaintiffs’ decisions.

Response at 8, Doc. 1660, filed June 9, 2022. The *Allen* Plaintiffs also state:

It is true, as the United States posits, that Dr. Chief did not perform an “analysis touching upon the individual *Allen* Plaintiffs.” Motion at 1, 12. That is because it would have been improper for her to do so as the *Allen* Plaintiffs will testify about their own experiences to support their claims for annoyance, disturbance, and loss of use and enjoyment. Dr. Chief’s opinions and culturally-anchored perspective will be helpful to the jury to assess the reasonableness of the *Allen* Plaintiffs’ decisions and conduct. Without Dr. Chief’s testimony, the jury will lack the relevant background information necessary to properly determine the reasonableness of noneconomic damages.

....

Dr. Chief's opinions are relevant and helpful because her opinions provide helpful context regarding (1) the reasonableness of the *Allen* Plaintiffs' post-Spill conduct and damages; and (2) how individual *Allen* Plaintiffs' choices were consistent with the measured behaviors regarding risk-perception, stigma, annoyance and disturbance, and loss of use and enjoyment ... Dr. Chief will not, as suggested by the United States, offer opinions as to whether any individual *Allen* Plaintiff did, [or] did not, suffer noneconomic damages or the value of their damages.

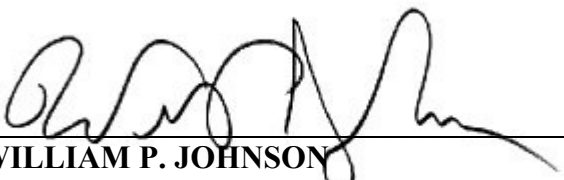
....

Dr. Chief's opinions provide necessary information about the circumstances of this case to "help the trier of fact to understand the evidence or to determine a fact in issue." Fed. R. Evid. 702. This includes her expert opinions on the historical trauma that informed risk perception of Navajo farmers along the River, measured perceptions regarding stigma, and the historical nature of the relationship between Navajo people and the River. **Ex. 1** at 2. Although individual *Allen* Plaintiffs will provide direct evidence of their individual choices and damages, Dr. Chief's opinions will equip a fact finder with the necessary cultural and historical context to understand the evidence presented by individual *Allen* Plaintiffs and determine the reasonableness of their decisions after the Spill.

Response at 9, 18-19.

The Court finds that Dr. Chief's opinions will not help the trier of fact. Dr. Chief's opinions are based on information she obtained personally as a Navajo living on the Navajo Nation and from other Navajos. It appears that the *Allen* Plaintiffs, who are Navajo, would possess similar information. Dr. Chief did not perform an "analysis touching upon the individual *Allen* Plaintiffs." It appears that Dr. Chief's opinions providing context for the individual *Allen* Plaintiffs' testimony regarding the reasons for their decisions are essentially vouching for the truthfulness of the individual *Allen* Plaintiffs. *See United States v. Mangan*, 756 Fed.Appx. 807, 813 (10th Cir. 2018) ("This court has also held that 'expert testimony which does nothing but vouch for the credibility of another witness encroaches upon the jury's vital and exclusive function to make credibility determinations, and therefore does not assist the trier of fact....'" (quoting *United States v. Charley*, 189 F.3d 1251, 1267 (10th Cir. 1999))). A jury is capable of understanding the individual *Allen* Plaintiffs' testimony regarding the reasons for their decisions without an expert's help.

IT IS ORDERED that the United States' Motion to Exclude the Expert Testimony of *Allen* Plaintiffs' Expert Dr. Karletta Chief, Doc. 1630, filed April 28, 2022, is **GRANTED**.



WILLIAM P. JOHNSON
CHIEF UNITED STATES DISTRICT JUDGE